

AMENDMENT

Please add claims 34-38 so that the current status of all claims is as follows:

1-16. (Cancelled).

17. (Previously Presented) A synchronous generator comprising:

a stator having a plurality of windings; and

a rotor having a plurality of poles, the rotor being movable relative to the stator, the poles defining a plurality of gaps, two or more of the gaps having different widths.

18. (Previously Presented) The synchronous generator of claim 17 wherein each pole has a cross-sectional area, and the cross-sectional area of at least one pole is greater than the cross-sectional area of at least one other pole.

19. (Previously Presented) The synchronous generator of claim 17 wherein the plurality of poles define a plurality of gaps, and at least one of the gaps is wider than at least one of the other gaps.

20. (Previously Presented) The synchronous generator of claim 19 wherein at least one of the gap has a first width, at least one of the gaps has a second width, and at least one of the gaps has a third width.

21. (Previously Presented) The synchronous generator of claim 20 wherein the gaps are air gaps.

22. (Previously Presented) The synchronous generator of claim 17 wherein each of the poles is formed with a pole piece, each pole piece has at least one leading edge, the leading edge extending essentially obliquely with respect to the motion of the rotor.

23. (Previously Presented) The synchronous generator of claim 22 wherein the leading edge has first and second sections, the first and second sections of the leading edge being oriented at an angle with respect to one another thereby forming a point.

24. (Previously Presented) The synchronous generator of claim 23 wherein the first and second sections of the leading edge are positioned at an angle between about 100° and about 140° relative to the direction of motion of the rotor.

25. (Previously Presented) The synchronous generator of claim 24 wherein the first and second sections of the leading edge are positioned at an angle of about 120° relative to the direction of motion of the rotor.

26. (Previously Presented) The synchronous generator of claim 22 wherein each of the pole pieces has at least one trailing edge, the trailing edge extending essentially obliquely with respect to the motion of the rotor.

27. (Previously Presented) The synchronous generator of claim 26 wherein the trailing edge has first and second sections, the first section of the trailing edge being substantially parallel to the first section of the leading edge, and the second section of the trailing edge being substantially parallel to the second section of the leading edge.

28. (Previously Presented) The synchronous generator of claim 26 wherein the leading edge is rounded and the trailing edge is rounded.

29. (Previously Presented) The synchronous generator of claim 22 wherein the pole piece has a cross-section, the cross-section having a trapezoid shape.

30. (Previously Presented) The synchronous generator of claim 29 wherein the pole piece has a center portion, a first side portion extending from one side of the center portion, and a second side portion extending from an opposite side of the center portion, the cross-section of the first side portion diminishing as it extends from the center portion, and the cross-section of the second side portion diminishing as it extends from the center portion.

31. (Previously Presented) A wind power plant comprising
a rotor;
a drive shaft connected to the rotor; and
a synchronous generator connected to the drive shaft, the synchronous generator
including a stator having a plurality of windings; and a rotor having a plurality of
poles, the rotor being movable relative to the stator, the poles being
asymmetrically positioned on the rotor.

32. (Previously Presented) A synchronous generator comprising:
a stator having a plurality of windings; and
a rotor having a plurality of poles, the rotor being movable relative to the stator, the poles
being asymmetrically positioned on the rotor, whereby the distance between
adjacent poles is inconsistent.

33. (Previously Presented) The synchronous generator of claim 32 wherein no two gaps have
the same width.

34. (New) A synchronous generator comprising:
a stator having a plurality of windings; and
a rotor having a plurality of poles, the rotor being movable relative to the stator, the poles defining a plurality of gaps, wherein at least one of the gap has a first width, at least one of the gaps has a second width, and at least one of the gaps has a third width.
35. (New) The synchronous generator of claim 34, wherein no two gaps have the same width.
36. (New) The synchronous generator of claim 34, wherein the first width is proximate the second width and less than the second width, and the second width is proximate the third width and less than the third width.
37. (New) The synchronous generator of claim 34, wherein the first width is proximate the second width and greater than the second width, and the second width is proximate the third width and greater than the third width.
38. (New) A synchronous generator comprising:
a stator having a plurality of windings; and
a rotor having a plurality of poles, the rotor being movable relative to the stator, the poles having a constant width and defining a plurality of gaps, two or more of the gaps having different widths.